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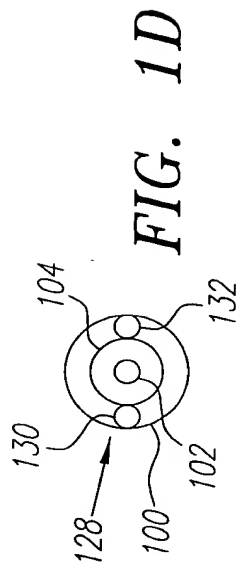
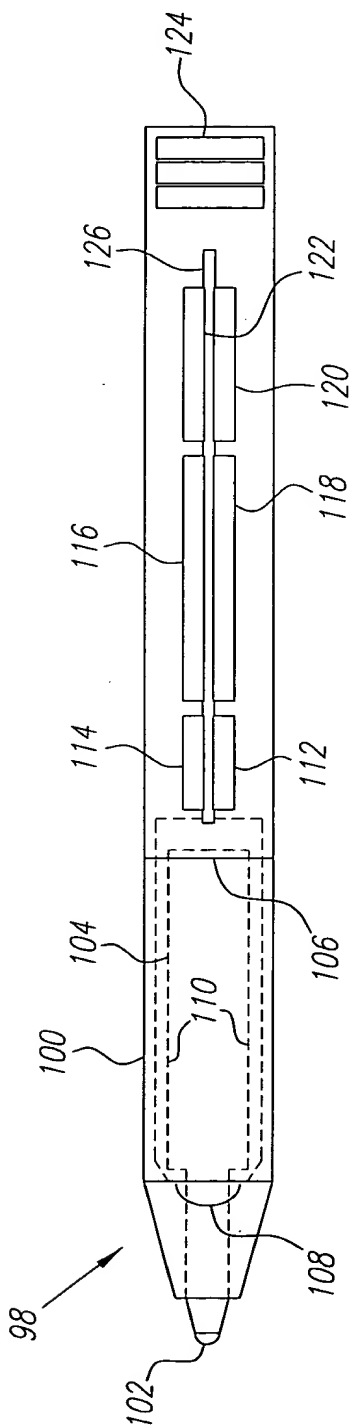
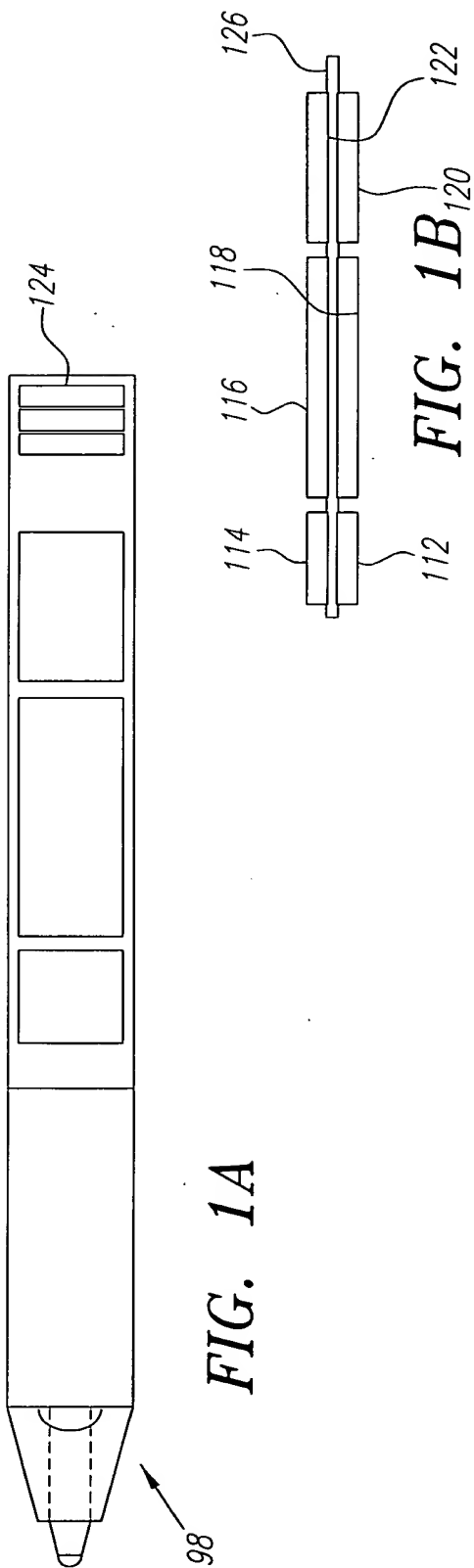


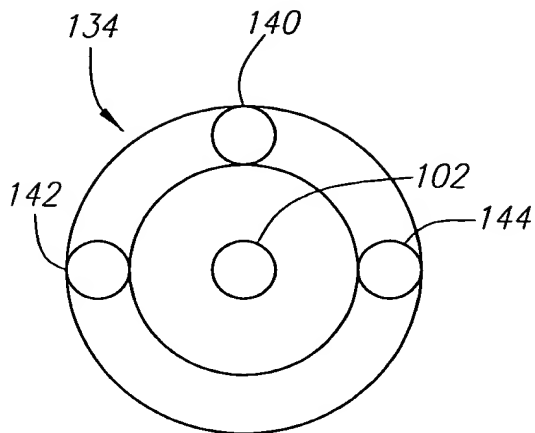
FIG. 1C

FIG. 1D

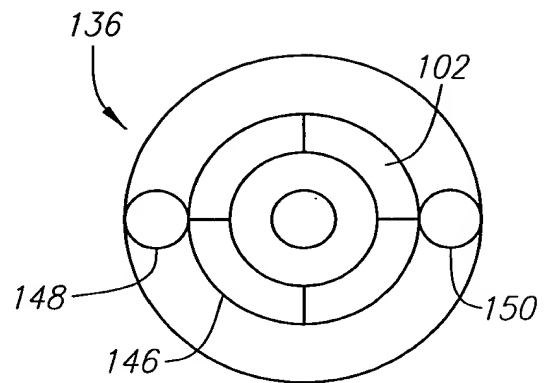
FIG. 1A

FIG. 1B

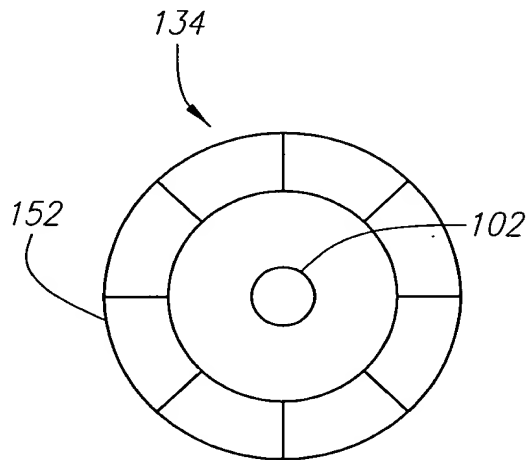
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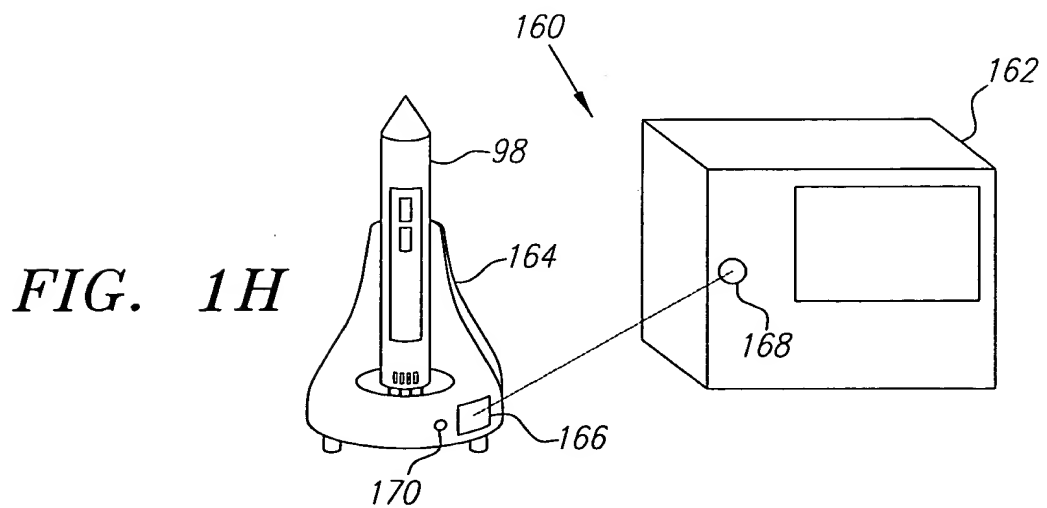
*FIG. 1E*



*FIG. 1F*



*FIG. 1G*



*FIG. 1H*

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FIG. 1E

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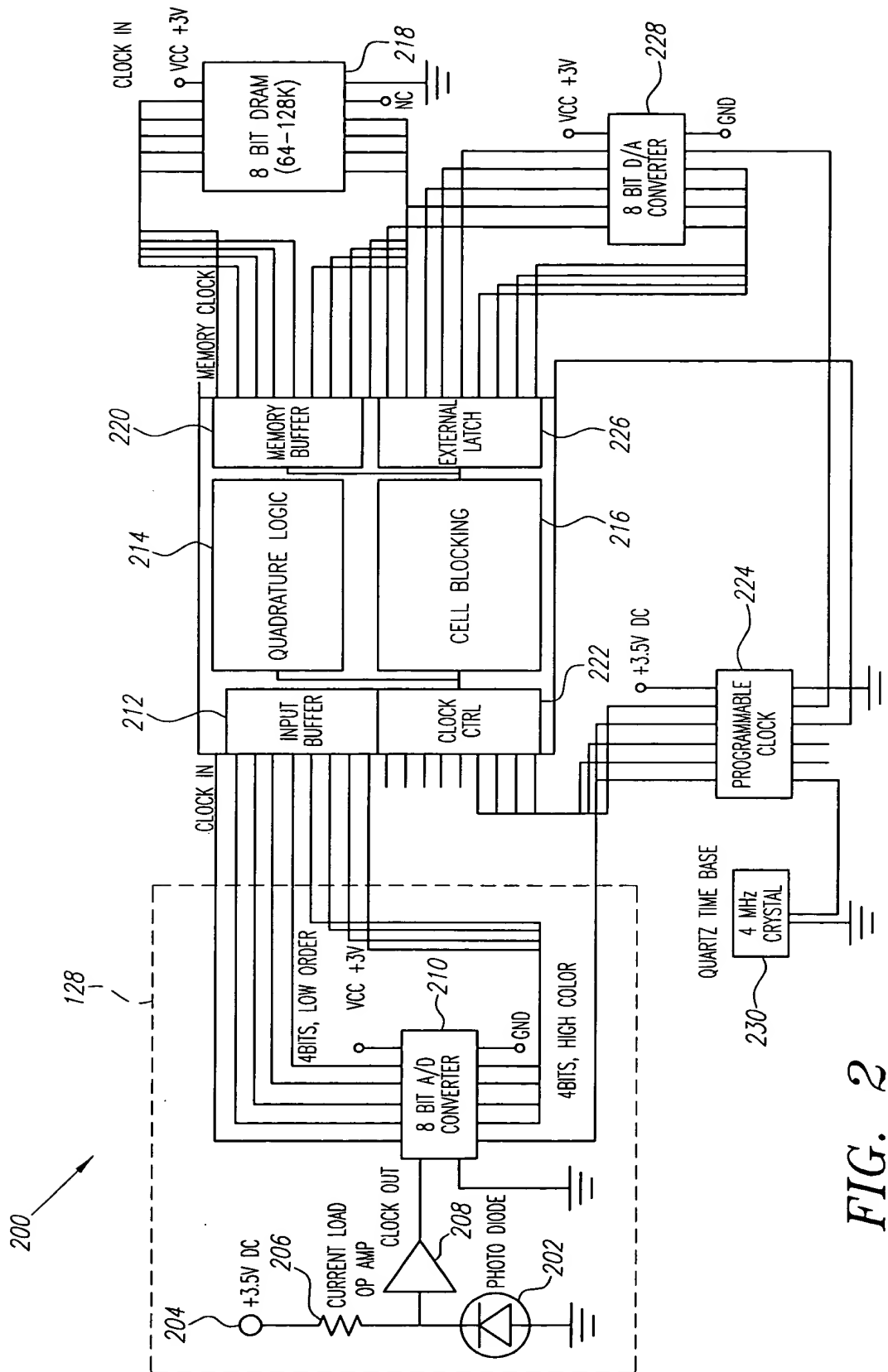


FIG. 2

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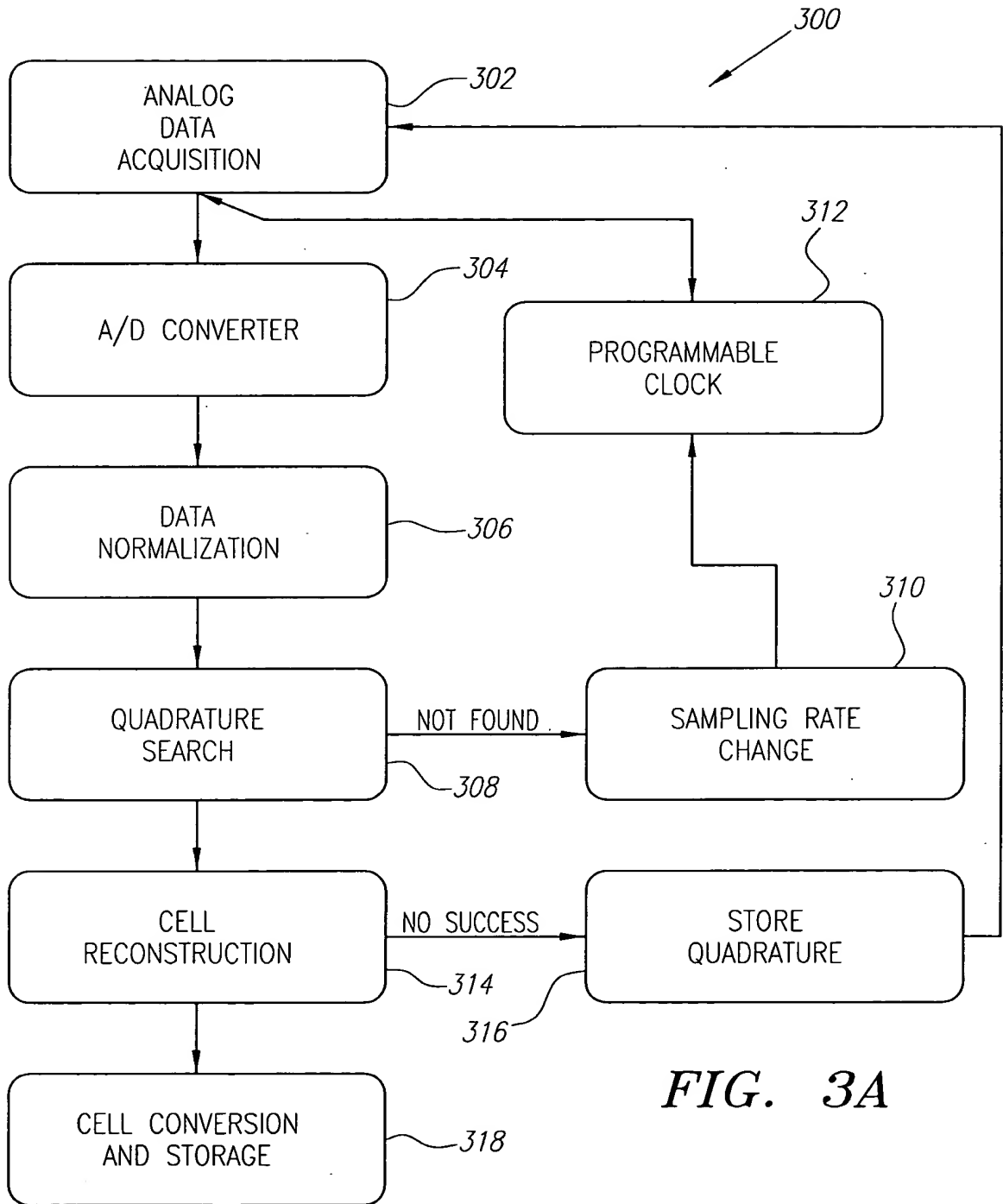


FIG. 3A

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└

FIG. 3B



FIG. 3B

└

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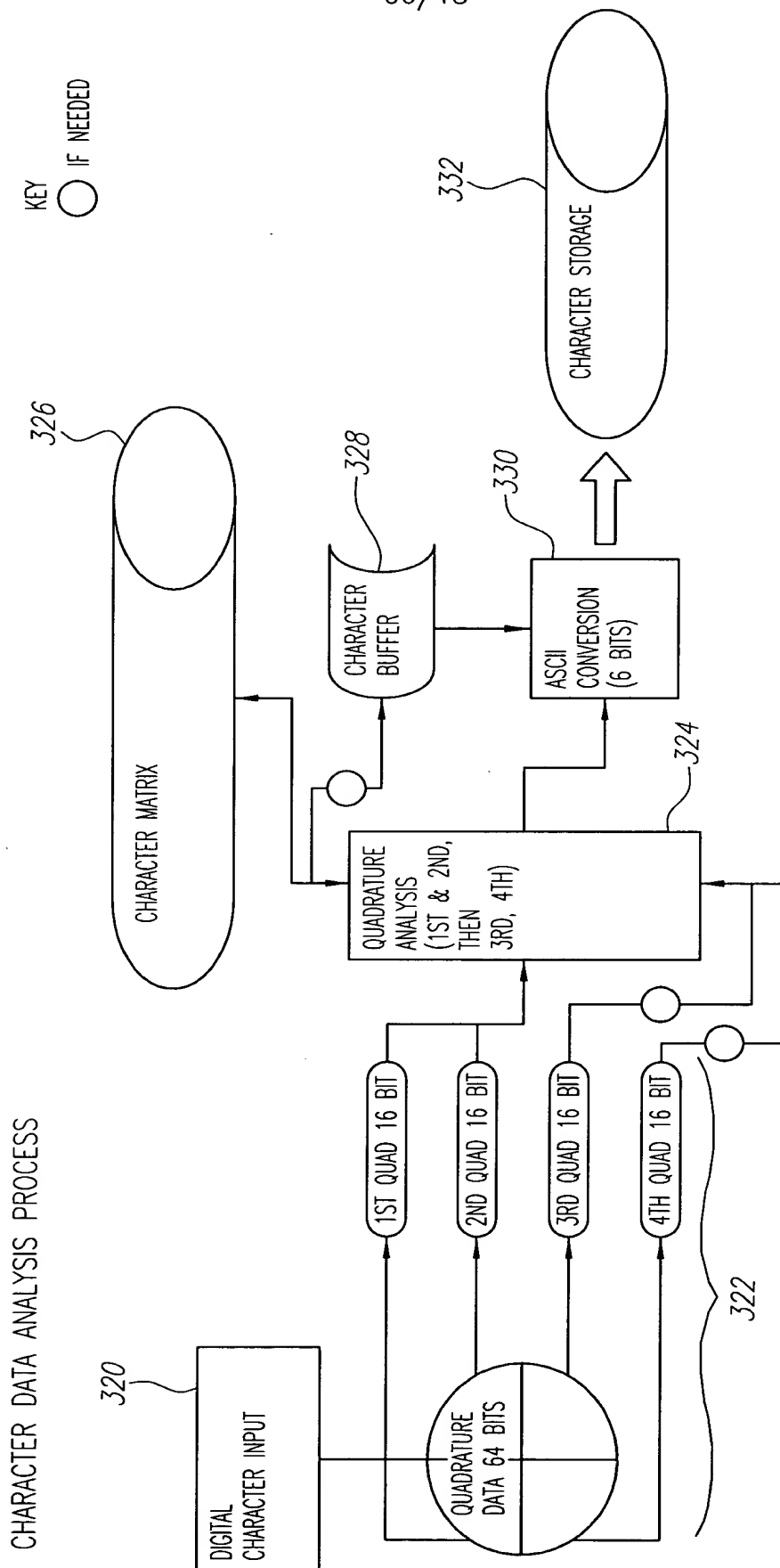


FIG. 3C

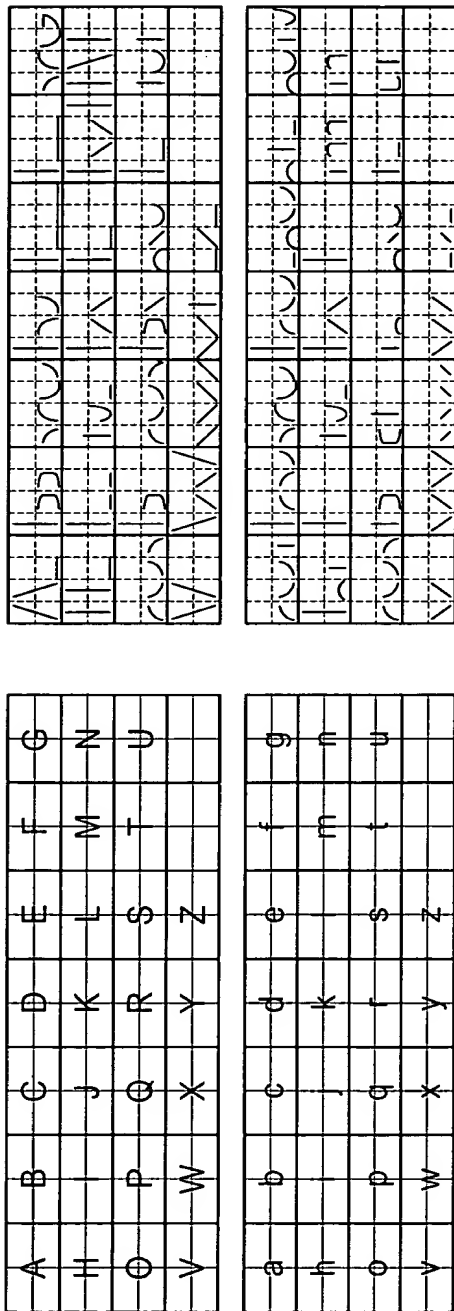


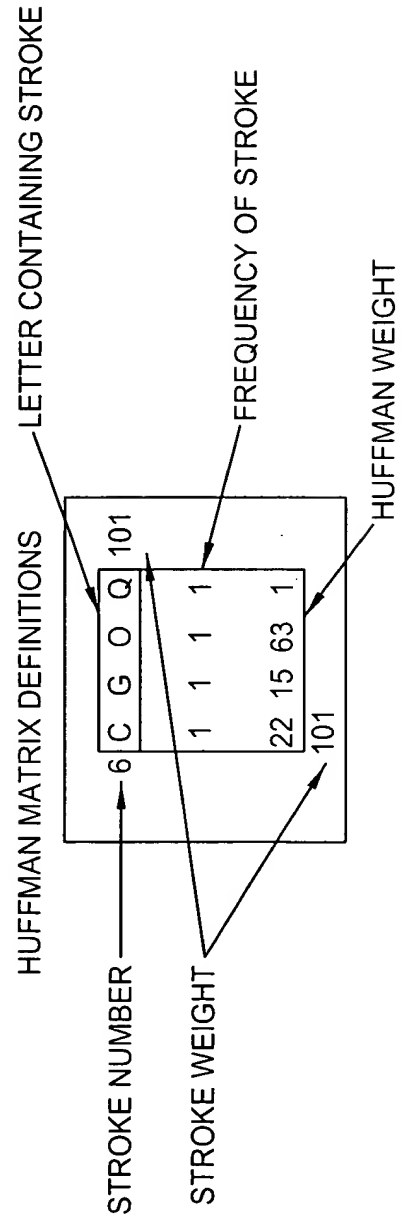
FIG. 3E

FIG. 3D

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1	A	K	V	W	X	Y	Z	M	258								
A	1	1	1	2	1	1	1	1									
B	64	5	8	18	1	16	1	20									
2	A	K	M	N	V	W	X	Y	207								
A	1	1	1	1	1	2	1	1									
B	64	5	20	57	8	18	1	16									
3	A	E	F	G	H	I	J	L	T	Z	649						
A	1	3	2	1	1	2	1	1	1	2							
B	64	103	21	15	47	57	1	32	80	1							
4	B	D	E	F	H	I	J	K	L	M	N	P	R	T	U	Y	694
A	1	1	1	1	2	1	1	1	1	2	2	1	1	1	2	1	
B	13	32	103	21	47	57	1	5	32	20	57	15	48	80	23	16	
5	B	P	R	S	140	6	C	G	O	Q	101						
A	2	1	1	1			A	1	1	1	1						
B	13	15	48	51			B	22	18	63	1						
7	C	G	O	Q	S	152	8	C	D	G	J	O	U	156			
A	1	1	1	1	1			1	1	1	1	1	1				
B	22	15	63	1	51			22	32	15	1	63	23				
9	D	O	Q	96	10	Q		11	S	51	12	X	1				
A	1	1	1						1					1			
B	32	63	1											51			

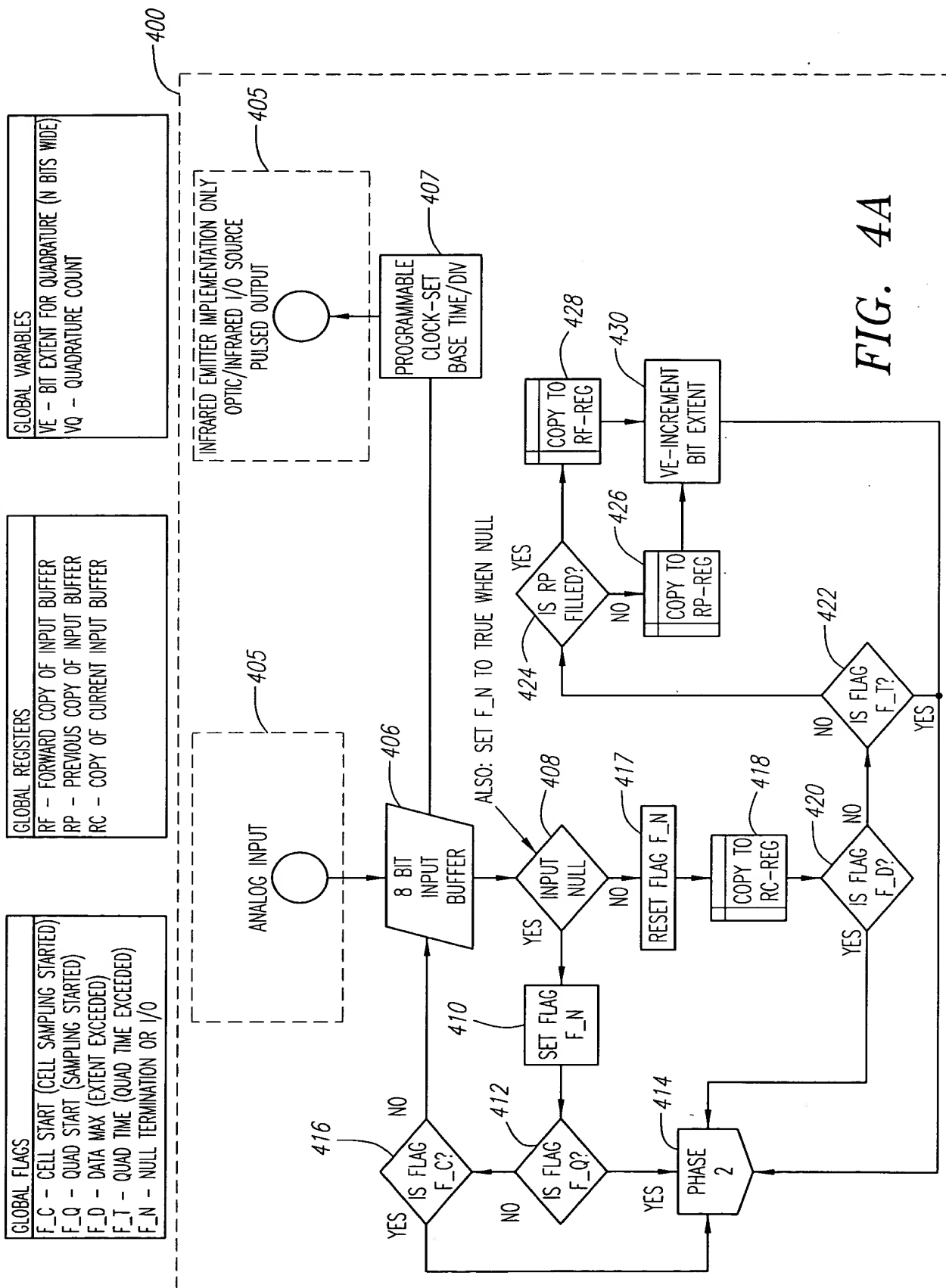
FIG. 3F





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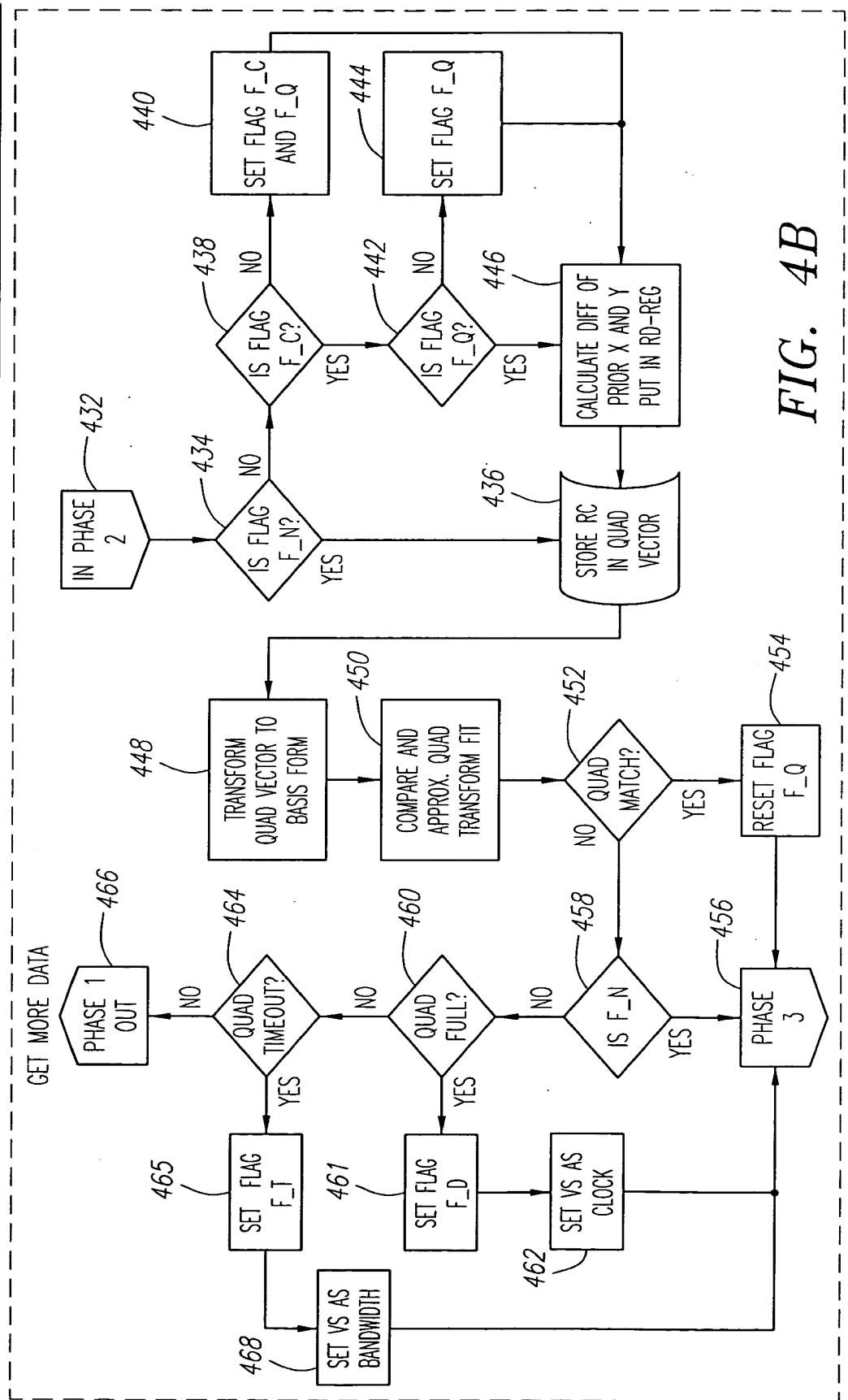
FUNCTIONAL DEFINITION OF DETECTION PROCESS - PHASE 1



GLOBAL VARIABLES	
VE	- BIT EXTENT FOR QUADRATURE (N BITS WIDE)
VQ	- QUADRATURE COUNT
VS	- ADAPTIVE CONTROL EVENT

GLOBAL REGISTERS	
RF	- FORWARD COPY OF INPUT BUFFER
RP	- PREVIOUS COPY OF INPUT BUFFER
RC	- COPY OF CURRENT INPUT BUFFER
RD	- DIFFERENCE IN X/Y

GLOBAL FLAGS	
F_C	- CELL START (CELL SAMPLING STARTED)
F_Q	- QUAD START (SAMPLING STARTED)
F_D	- DATA MAX (EXTENT EXCEEDED)
F_T	- QUAD TIME (QUAD TIME EXCEEDED)
F_N	- NULL TERMINATION OR I/O STOP



FUNCTIONAL DEFINITION OF CELL BLOCKING - PHASE 3

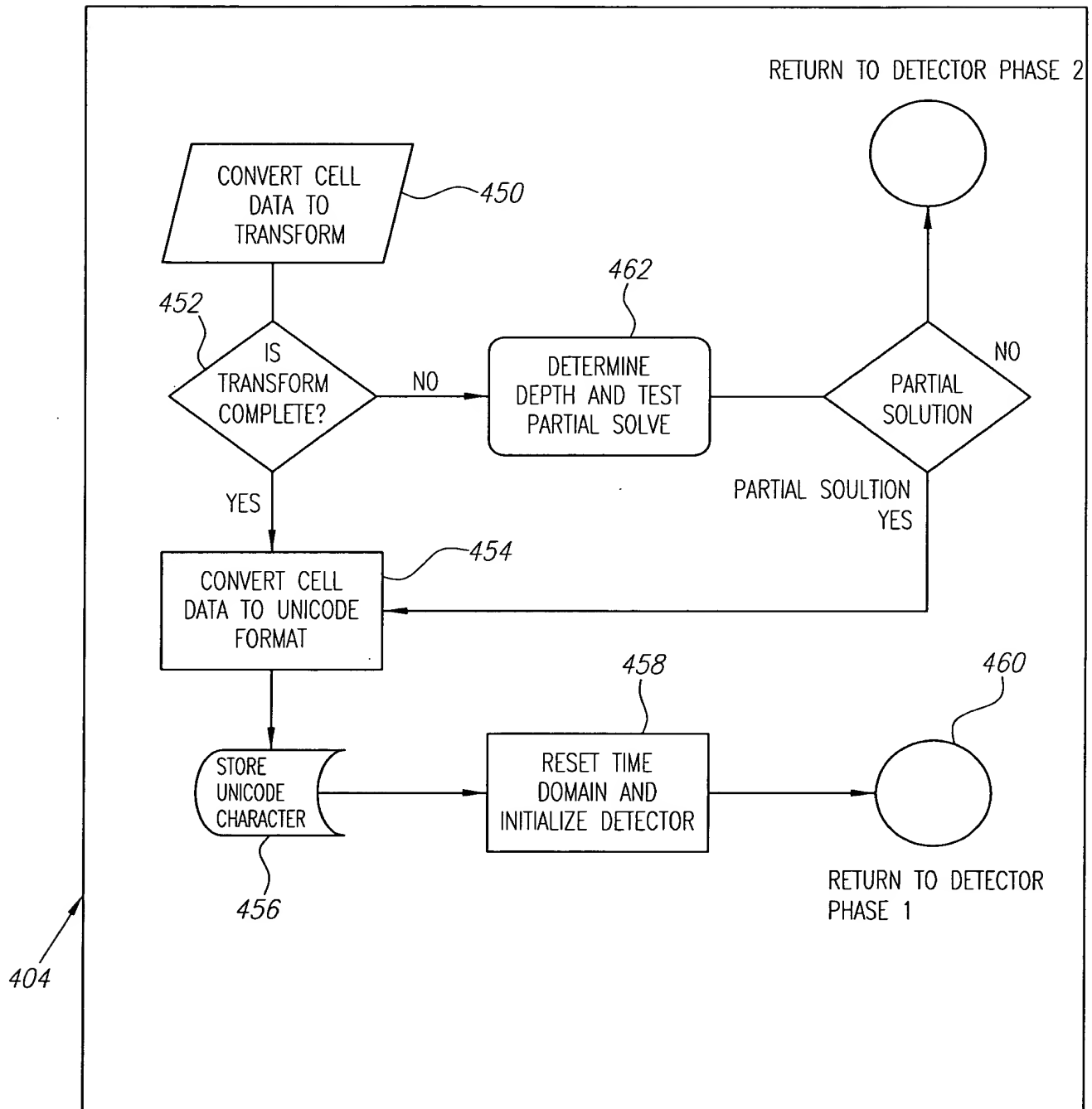
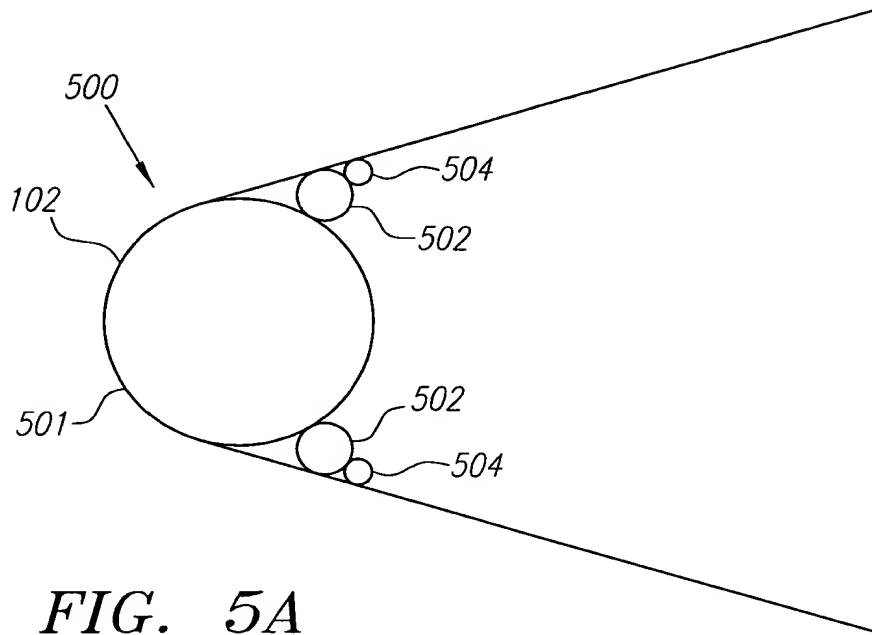
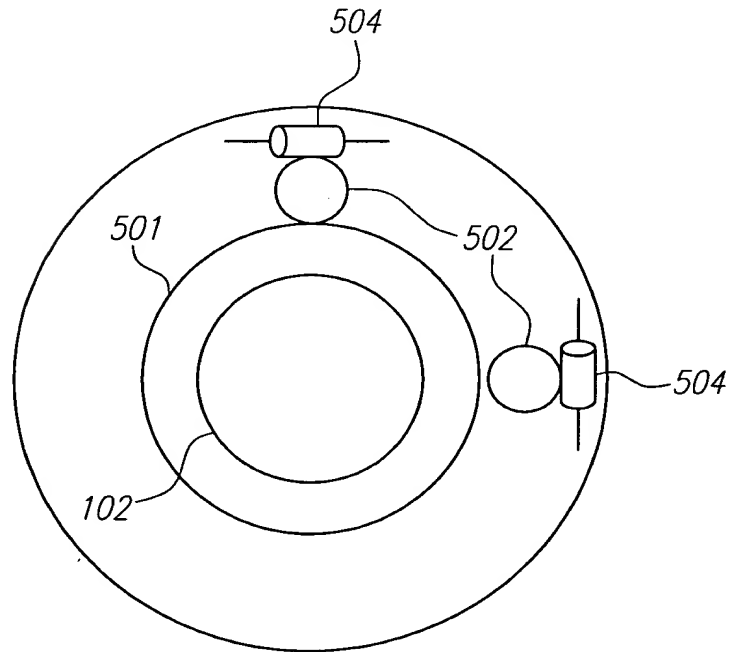


FIG. 4C

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*FIG. 5A*



*FIG. 5B*

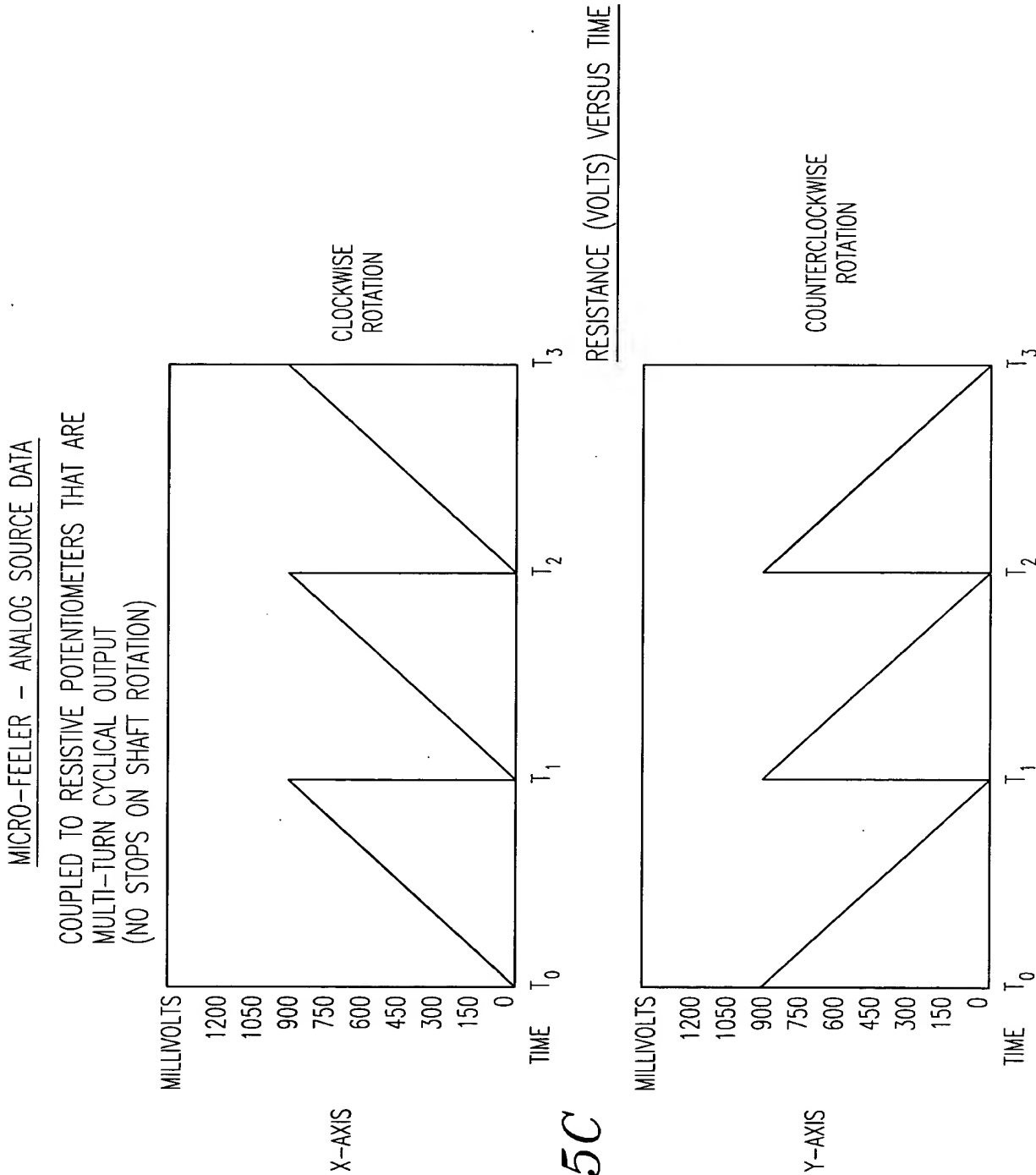
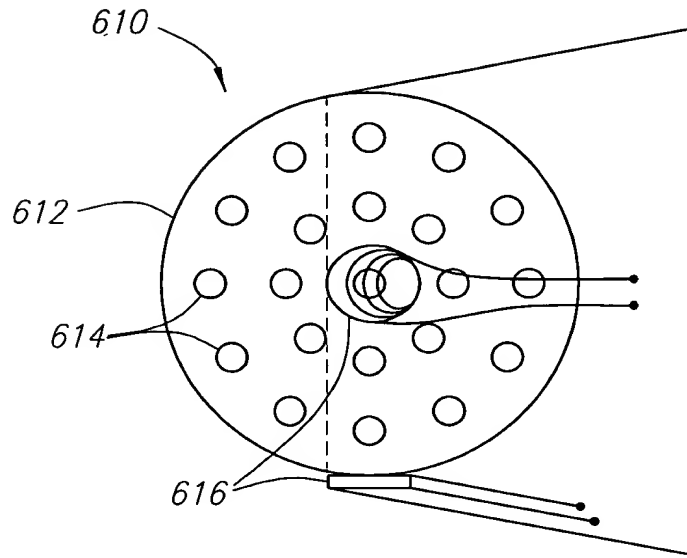
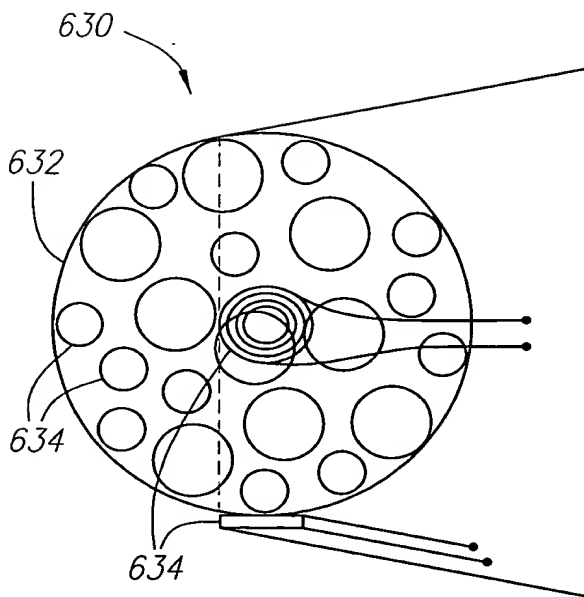


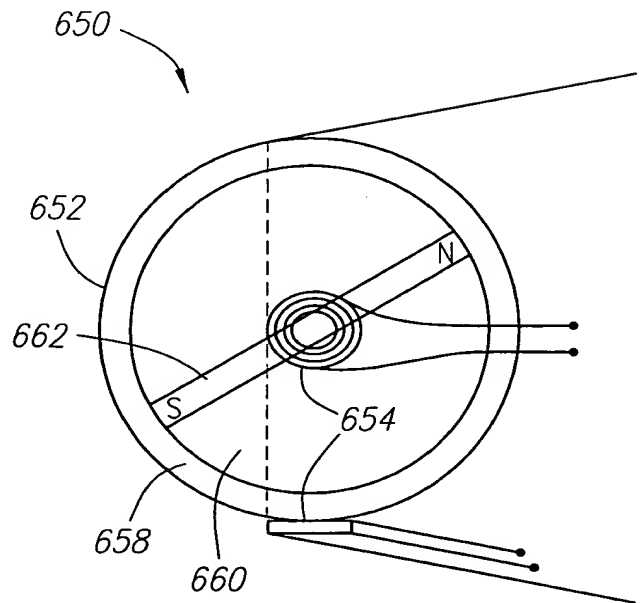
FIG. 5C



*FIG. 6A*



*FIG. 6B*

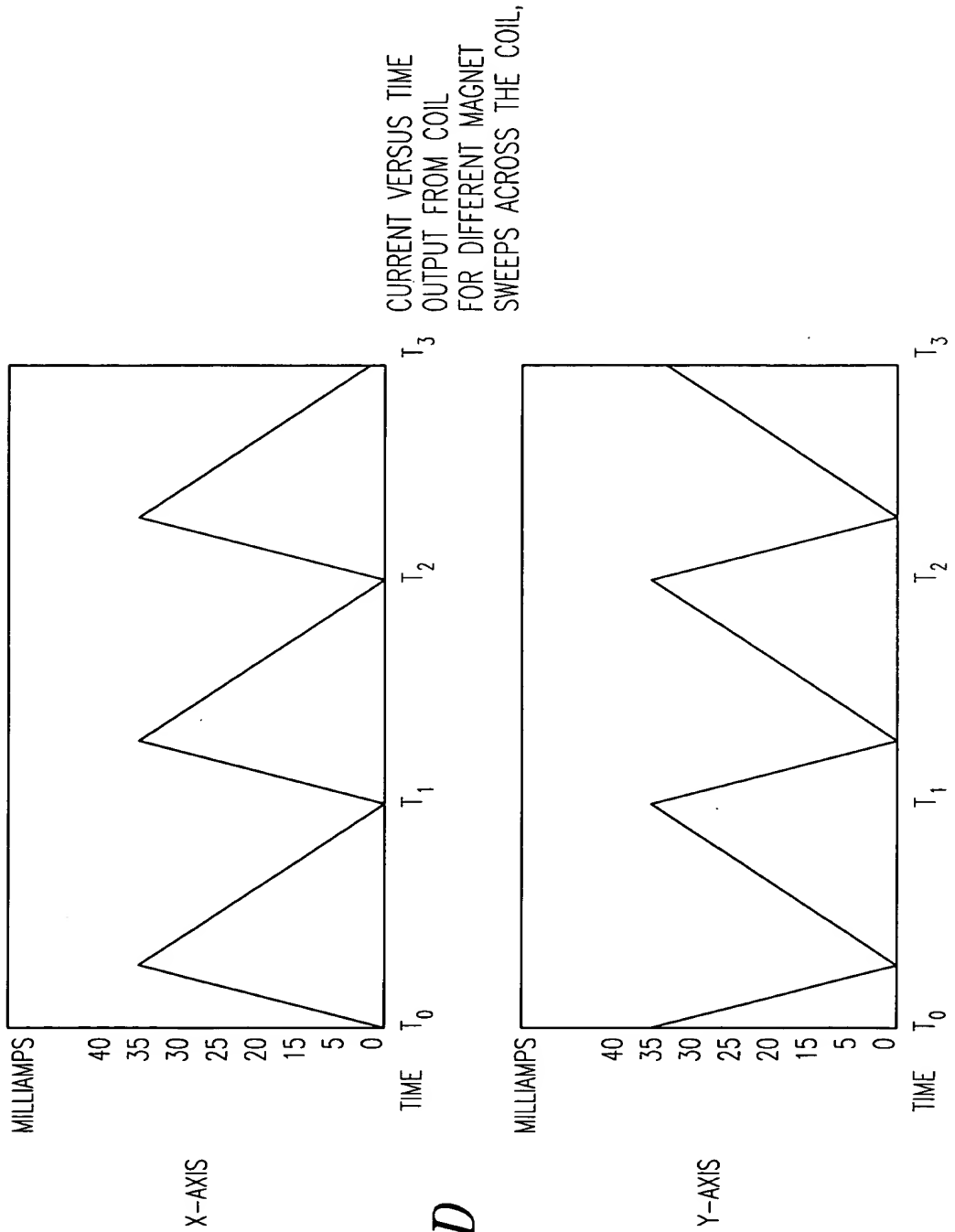


*FIG. 6C*

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FILED 09/25/01

SYMMETRIC MULTI-DOMAIN - ANALOG SOURCE DATA

ROTATION OF DOMAINS ON AN AXIS PRODUCE EITHER  
INCREASING OR DECREASING CURRENTS FROM  
TIGHT TO LOOSE COIL BINDINGS.

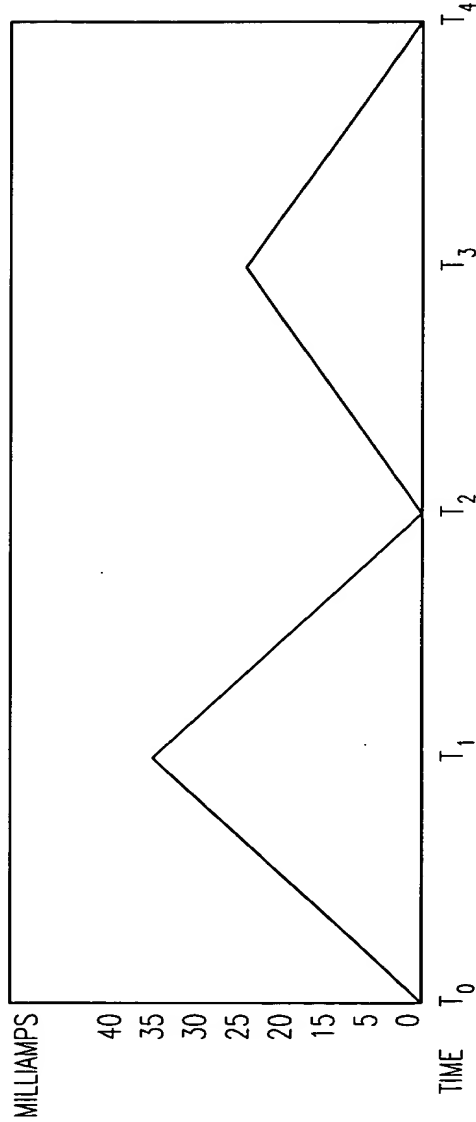


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CURRENT VERSUS TIME  
OUTPUT FROM COIL  
FOR DIFFERENT MAGNET  
SWEEPS ACROSS THE COIL,  
AND AS DOMAIN SIZES AND  
MAGNETIC FIELD STRENGTH  
VARY SO DOES THE PERIOD

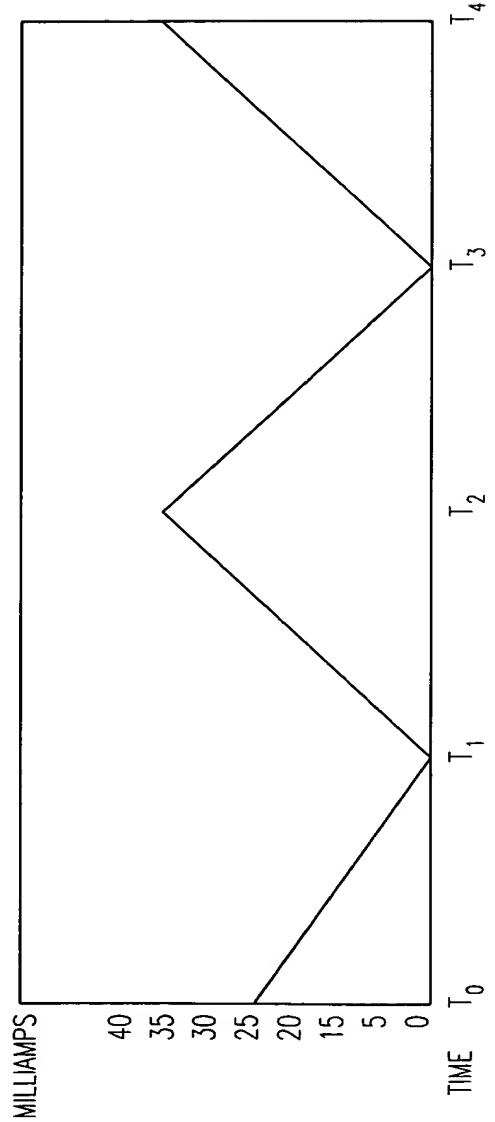
ASYMMETRIC MULTI-DOMAIN - ANALOG SOURCE DATA

MAGNETIC POLES ARE DISTRIBUTED IN A CHARACTERIZED,  
NON-UNIFORM PATTERN THAT MAPS VARIATIONS OF CURRENT,  
SLOPE/RISE, AND TIME TO A UNIQUE VALUE.



X-AXIS

FIG. 6E



Y-AXIS



SYMMETRIC UNI-DOMAIN - ANALOG SOURCE DATA

ROTATION OF DOMAINS ON AN AXIS PRODUCE EITHER INCREASING OR DECREASING CURRENTS FROM TIGHT TO LOOSE COIL BINDINGS.

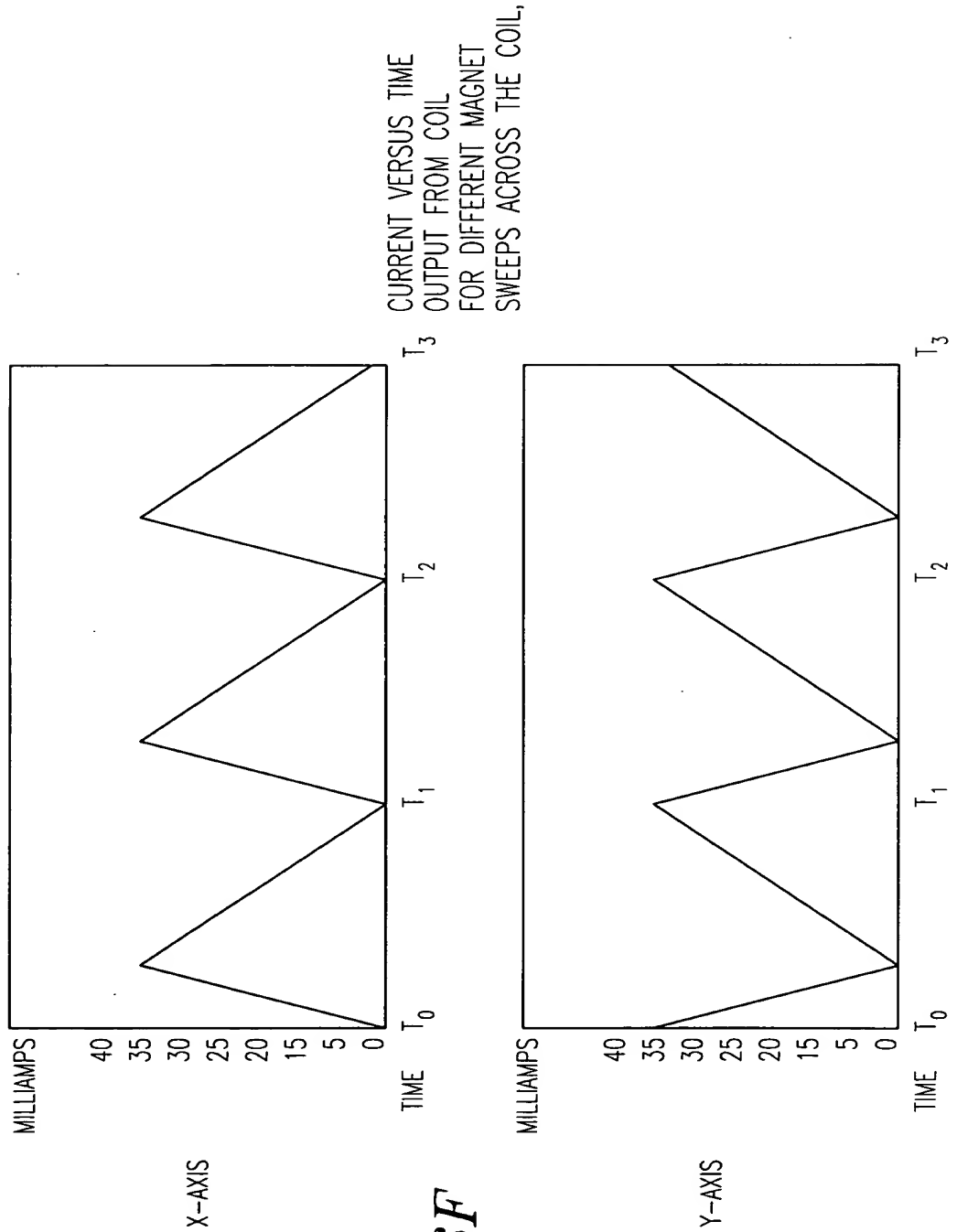


FIG. 6F

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MICRO FEELER OR INDUCTION COIL INPUT DEVICE

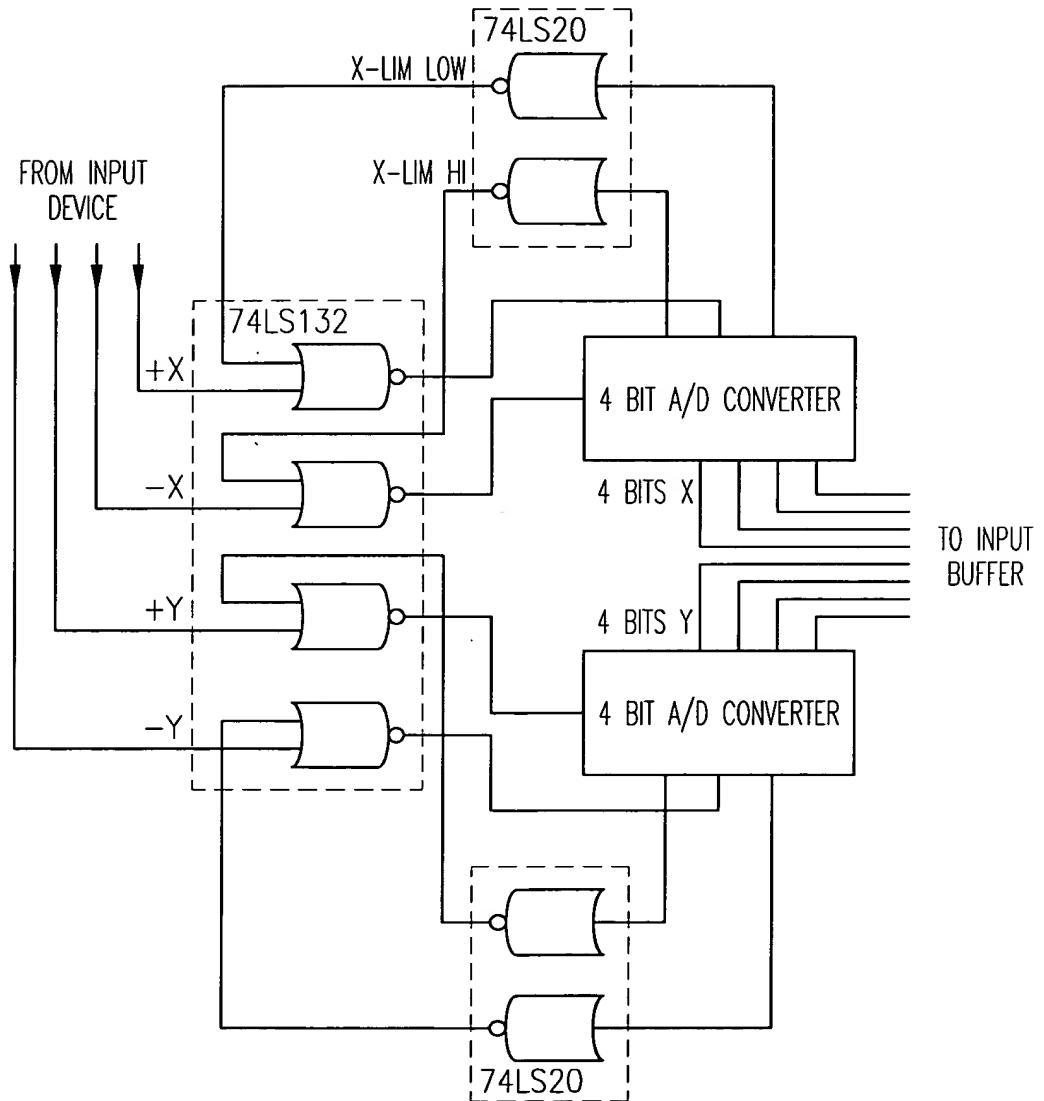


FIG. 7